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REMARKS

This Amendment is in response to the Office Action of April 13, 2005. The Office Action indicated that Claims 1-51 are pending and Claims 1-51 are rejected. With this Amendment, Claims 1, 30, 36, 39, 40, 42, 48-51 are amended, and Claims 1-51 are presented for reconsideration and allowance.

Rejections under 35 USC 102Rejection A.

Claim 39 was rejected under 35 USC 102(b) as being anticipated by Duran US 5545215.

With this Amendment, Claim 39 is amended to include a limitation to the reinforcement element comprising a circular band that is circumferentially attached.

Duran does not disclose a band that is circular as claimed in Claim 39. Duran instead shows only a frame that includes complex curvatures and does not include a circular portion.

Claim 39, as presently amended, is novel over Duran. Reconsideration and allowance of Claim 39 is therefore requested.

Rejection B.

Claims 42, 44 and 51 were rejected under 35 USC 102(b) as being anticipated by Klostermeyer US 5891195.

With this Amendment, Claim 42 is amended to include a limitation to the first prosthetic conduit section having a generally straight surface in an axial direction.

Klostermeyer does not disclose a first conduit section having a generally straight surface in an axial direction as claimed in Claim 42. Klostermeyer instead teaches only a single conduit that terminates at a valve. Furthermore, Klostermeyer's single conduit is corrugated and thus does not have a generally

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straight surface in an axial direction as claimed in amended Claim 42.

For these reasons, amended Claim 42, as well as Claim 44 that depends from amended Claim 42, are believed to be novel over Klostermeyer. Reconsideration and allowance of Claims 42 and 44 is therefore requested.

With this Amendment, Claim 51 is amended to include a limitation to a prosthetic conduit with a generally cylindrical section that has a generally straight surface in an axial direction.

Klostermeyer does not disclose a prosthetic conduit with a generally cylindrical section that has a generally straight surface in an axial direction. Klostermeyer instead discloses a corrugated conduit. A conduit that is corrugated does not have a generally straight surface in an axial direction.

For these reasons, amended Claim 51 is believed to be novel over Klostermeyer. Reconsideration and allowance of amended Claim 51 is requested.

Rejection C.

Claim 48 was rejected under 35 USC 102(b) as being anticipated by Fogarty US 5824037.

With this Amendment, Claim 48 is amended to include a limitation to a prosthetic conduit having a generally straight surface in an axial direction.

Fogarty does not disclose a prosthetic conduit that has a generally straight surface in an axial direction as presently claimed in Claim 48. Fogarty instead discloses mesh and corrugated surfaces on a conduit. Conduits with mesh and corrugated surfaces do not have surfaces with a generally straight surface in an axial direction as in Claim 48.

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For these reasons, Claim 48 is believed to be novel relative to Fogarty. Reconsideration and allowance of Claim 48 is therefore requested.

Rejection D.

Claims 1, 7-15, 18, 27-29, 36, 38, 40 and 50 were rejected under 35 USC 102(a) as being anticipated by De Paulis US 2001/0049553.

With this Amendment, Claims 1, 36 and 40 are amended to include a limitation to a generally cylindrical section having a generally straight surface in an axial direction.

De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a generally straight surface in an axial direction as claimed in amended Claims 1, 36 and 40.

For these reasons, amended Claims 1, 36 and 40, as well as Claims 7-15, 18, 27-29, and 38 which depend from amended Claims 1 and 36 are believed to be novel. Reconsideration and allowance of Claims 1, 7-15, 18, 27-29, 36, 38 and 40 is therefore requested.

With this Amendment, Claim 50 is amended to include a limitation to a prosthetic conduit having a generally straight surface in an axial direction.

As above, De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a generally straight surface in an axial direction as claimed in amended Claim 50.

For these reasons, amended Claim 50 is believed to be novel. Reconsideration and allowance of Claim 50 is therefore requested.

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Rejection E.

Claims 1, 7, 8, 18, 19, 26-29 and 48 were rejected under 35 USC 102(a) as being anticipated by Solem US 2001/0041927.

With this Amendment, Claim 1 is amended to include a limitation to an edge shaped for attachment around a heart valve. Claim 48 is amended to include a limitation to a prosthetic conduit being shaped for attachment around a heart valve.

Solem does not disclose this. Solem instead teaches a branching device with a sleeve 10 that does not an edge shaped for attachment around a heart valve.

For these reasons, amended Claims 1 and 48 are believed to be novel relative to Solem. Reconsideration and allowance of amended Claim 1 and 48, as well as Claims 7, 8, 18, 19 and 26-29, is therefore requested.

Rejections under either 35 USC 102 or 35 USC 103Rejection F.

Claims 21-22 were rejected under 35 USC 102(a), or alternatively, under 35 USC 103(a) over De Paulis 2001/0049553.

With the amendment to Claim 1 discussed above in connection with Rejection D., Claims 21-22 include a limitation to a generally cylindrical section having a generally straight surface in an axial direction.

De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a generally straight surface in an axial direction as claimed in Claims 21-22.

For these reasons, Claims 21-22 are believed to be novel. Reconsideration of the rejection under 35 USC 102(a) and allowance of Claims 21-22 is therefore requested.

De Paulis does not teach or suggest providing a generally cylindrical section with a generally straight surface

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in an axial direction as claimed in Claim 1. Moreover, De Paulis teaches providing corrugated surfaces, which provide support to a device. A person of ordinary skill in the art would not be motivated to add a reinforcement element as claimed in Claim 1 because the corrugated surfaces are already providing support in De Paulis.

For these reasons, Claims 21-22, which depend from Claim 1, are believed to be non-obvious and patentable. The additional limitations provided in Claims 21-22 are believed to be patentable when taken in combination with the limitations in amended Claim 1. Reconsideration of the rejection under 35 USC 103(a) and allowance of Claims 21-22 is therefore requested.

Rejection G.

Claims 10, 11, 21 and 23 were rejected under 35 USC 102(a), or alternatively, under 35 USC 103(a) over Solem.

With the amendment to Claim 1 discussed above in connection with Rejection E., Claims 10, 11, 21 and 23 include a limitation to an edge shaped for attachment around a heart valve.

Solem does not disclose this. Solem instead teaches a branching device with a sleeve 10 that does not have an edge shaped for attachment around a heart valve.

For these reasons, Claims 10, 11, 21 and 23 are believed to be novel. Reconsideration of the rejection under 35 USC 102(a) and allowance of Claims 10, 11, 21 and 23 is therefore requested.

Solem does not teach or suggest an edge shaped for attachment around a heart valve. Solem instead teaches a branching device with a sleeve 10 that does not have an edge shaped for attachment around a heart valve.

For these reasons, Claims 10, 11, 21 and 23 are believed to be non-obvious and patentable. The additional limitations provided in Claims 10, 11, 21 and 23 are believed to

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be patentable when taken in combination with the limitations in amended Claim 1. Reconsideration of the rejection under 35 USC 103(a) and allowance of Claims 10, 11, 21 and 23 is therefore requested.

Rejections under 35 USC 103

Rejection H.

Claims 2-6, 16, 20, 24, 25, and 37 were rejected under 35 USC 103(a) over De Paulis.

Claims 1 and 36 are amended to include a limitation to a generally cylindrical section having a generally straight surface in an axial direction.

De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a generally straight surface in an axial direction as claimed in amended Claims 1 and 36. De Paulis relies on corrugated surfaces to provide reinforcement and does not teach or suggest providing a reinforcement element that is circumferentially positioned at the junction. De Paulis does not teach or suggest providing a generally cylindrical section with a generally straight surface in an axial direction.

For these reasons, Claims 2-6, 16, 20, 24, 25 and 37 which depend from amended Claims 1 and 36 are believed to be non-obvious and patentable. Limitations in the dependent claims are believed to be patentable when taken in combination with the limitations of Claim 1. Reconsideration of the rejection under 35 USC 103(a) and allowance of Claims 2-6, 16, 20, 24, 25 and 37 is therefore requested.

Rejection I.

Claims 17 and 30-35 were rejected under 35 USC 103(a) over De Paulis in view of Ramos Martinez 5314468.

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Claims 1 and 30 are amended to include a limitation to a generally cylindrical section having a generally straight surface in an axial direction.

De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a generally straight surface in an axial direction as claimed in amended Claims 1 and 30. De Paulis relies on corrugated surfaces to provide reinforcement and does not teach or suggest providing a reinforcement element that is circumferentially positioned at the junction. De Paulis does not teach or suggest providing a generally cylindrical section with a generally straight surface in an axial direction.

Ramos Martinez also does not teach or suggest providing a generally cylindrical section with a generally straight surface in an axial direction.

Neither De Paulis nor Ramos Martinez, taken singly or in combination, teach or suggest providing a generally cylindrical section with a generally straight surface in an axial direction.

For these reasons, Claims 17, which depend from amended Claim 1, and claims 30-35 are believed to be non-obvious and patentable. Reconsideration of the rejection under 35 USC 103(a) and allowance of Claims 17 and 30-35 is therefore requested.

Rejection J.

Claims 19, 39, 41-47, 49 and 51 were rejected under 35 USC 103(a) over De Paulis in view of Solem.

As discussed above in connection with Rejection D., Claim 1 is amended to include a limitation to a generally cylindrical section with a generally straight surface in an axial direction.

De Paulis discloses only corrugated surfaces on conduits. A conduit with a corrugated surface does not have a

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generally straight surface in an axial direction as claimed in amended Claim 1. De Paulis relies on corrugated surfaces to provide reinforcement and does not teach or suggest providing a reinforcement element that is circumferentially positioned at the junction. De Paulis does not teach or suggest providing a generally cylindrical section with a generally straight surface in an axial direction.

Solem teaches a branching device with a sleeve 10 that does not have an edge shaped for attachment around a heart valve.

Neither De Paulis nor Solem, taken singly or in combination, teach or suggest a combination of a generally straight surface in an axial direction on a generally cylindrical section in combination with an edge shaped for attachment to a heart valve as presently claimed in Claim 19, 39, 41-47 and 51.

For these reasons, Claims 19, which depends from amended Claim 1, and Claims 39, 41-47, 49 and 51 are believed to be non-obvious and patentable. Reconsideration of the rejection under 35 USC 103(a) and allowance of Claims 19, 39, 41-47, 49 and 51 is therefore requested.

Concluding remarks

The reference De Paulis US 6,352,554 mentioned in the Examiner's Conclusion on page 10 of the Office action has the same application serial number as De Paulis US 2001/0049553 that the Examiner cited as prior art in his rejections. The reference has thus been considered, and the Claims, as presently amended, are believed to be allowable over such reference.

The Application appears to be in condition for allowance and favorable action is requested. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' attorney of

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record, Hallie A. Finucane, at 612-334-3222.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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